



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2000276955 A**(43) Date of publication of application: **06.10.00**

(51) Int. Cl.

**H01B 11/22**(21) Application number: **11078657**(22) Date of filing: **23.03.99**(71) Applicant: **SUMITOMO ELECTRIC IND LTD**(72) Inventor: **TOKUMARU KAMETSURU  
SHIRATO NORIAKI**(54) **OPTICAL FIBER COMPOSITE ELECTRIC WIRE**

wires when the optical fibers 4 are largely opened and part of the cover layer 2 is removed.

(57) Abstract:

COPYRIGHT: (C)2000,JPO

**PROBLEM TO BE SOLVED:** To extract power source wires only for branch connection by continuously forming SZ-shaped grooves in the longitudinal direction on the outer surface of a cover layer, and storing optical fibers in the grooves.

**SOLUTION:** A cover layer 2 with a circular cross section common to conductors 1A, 1B is formed with a plastic material such as vinyl or polyethylene around two conductors 1A, 1B arranged in parallel at an interval, cut grooves 2a are provided at opposite positions, and SZ-shaped grooves 3 are continuously formed in the longitudinal direction on the outer surface of the cover layer 2. Optical fibers 4 are stored in the SZ-shaped grooves 3. The optical fibers 4 are stored in the SZ-shaped grooves 3 on the surface of the cover layer 2, can be easily extracted from the SZ-shaped grooves 3, and have a sufficient slack. The inner conductors 1A, 1B can be exposed and easily connected to branch electric

